# OPERATOR'S MANUAL
# MANUEL de L'UTILISATEUR
# MANUAL del OPERADOR

**Catalog No.**
**No de Cat.**
**Catálogo No.**
**6370-20**
**6370-21**

## 8" METAL CUTTING SAW
## SCIE À MÉTAUX 203 mm (8")
## SIERRA DE 203 mm (8") PARA CORTAR METAL

***TO REDUCE THE RISK OF INJURY, USER MUST READ OPERATOR'S MANUAL.***
***AFIN DE RÉDUIRE LE RISQUE DE BLESSURES, L'UTILISATEUR DOIT LIRE LE MANUEL DE L'UTILISATEUR.***
***PARA REDUCIR EL RIESGO DE LESIONES, EL USUARIO DEBE LEER EL MANUAL DEL OPERADOR.***

## GENERAL SAFETY RULES — FOR ALL POWER TOOLS

**WARNING**

### READ ALL INSTRUCTIONS

**Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-opearted (cordless) power tool.**

### SAVE THESE INSTRUCTIONS

## WORK AREA SAFETY

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

## ELECTRICAL SAFETY

4. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
5. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **Do not abuse the cord. Never use the cord for carrying, pulling, or unplugging the power tool. Keep cord away from heat, oil, sharp edges, or moving parts.** Damaged or entangled cords increase the risk of electric shock.
8. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

## PERSONAL SAFETY

9. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
10. **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
11. **Avoid accidental starting. Ensure the switch is in the off-position before plugging in.** Carrying tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
12. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
13. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
14. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery, or long hair can be caught in moving parts.
15. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust-related hazards.

## POWER TOOL USE AND CARE

16. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
17. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
18. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the tool accidentally.
19. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tools or these instructions to operate power tools.** Power tools are dangerous in the hands of untrained users.
20. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
21. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
22. **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

## SERVICE

23. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

## *SPECIFIC SAFETY RULES - FOR METAL CUTTING SAWS*

1. **DANGER!:**

   **Keep hands away from cutting area and blade. Keep your second hand on auxiliary handle or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.

   **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.

   **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.

   **NEVER hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.

   **Hold power tool by insulated gripping surfaces when performing an operation where the cutting tool may hidden wiring or its own cord.** Contact with a “live” wire will also make exposed metal parts of the tool “live” and shock the operator.

   **When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.

   **Always use blades with correct size and shape (diamond versus round) of arbor holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.

   **Never use damaged or incorrect blade washers or bolts.** The blade washers and bolts were specially designed for your saw, for optimum performance and safety of operation.

2. **Causes and Operator Prevention of KICKBACK:**

   KICKBACK is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.

   When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.

   If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward operator.

   *KICKBACK is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:*

   **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces.** Position your body to either side of the blade, but not in line with the blade. Kickback could cause the saw to jumb backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.

   **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.

   **When restarting a saw in the workpiece, center the saw blade in the kerf and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.

   **Support large panels to minimize the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

   **Do not use dull or damaged blade.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.

   **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.

   **Use extra caution when making a "plunge cut" (or pocket cut) into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

3. **Check lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the lower guard lever and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.

   **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a buildup of debris.

   **Lower guard should be retracted manually only for special cuts such as "plunge cuts" ("pocket cuts") and "compound cuts". Raise lower guard by lower guard lever and as soon as blade enters the material, the lower guard must be released.** For all other sawing, the lower guard should operate automatically.

   **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

4. **Maintain labels and nameplates.** These carry important information. If unreadable or missing, contact a *MILWAUKEE* service facility for a free replacement.

5. **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

   • lead from lead-based paint
   • crystalline silica from bricks and cement and other masonry products, and
   • arsenic and chromium from chemically-treated lumber.

   Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

6. **Do not touch material immediately after it has been cut.** Use caution; cut material may be hot and sharp.
7. **Do not use cutting oil.** The use of cutting oil may cause a fire.
8. **Do not use tool near flammable material.** Sparks may cause fire.
9. **Chip container cover may be hot after use.** Use caution when emptying chip container or changing the blade.
10. **Do not start the blade when in contact with workpiece.** Wait for blade to reach full speed before beginning cut.

## Symbology

| | |
|---|---|
| | Double Insulated |
| | Underwriters Laboratories, Inc. |
| V~ | Volts Alternating Current |
| A | Amperes |
| no xxxx /min. | No Load Revolutions per Minute (RPM) |
| | Mexican Approvals Marking |

## Specifications

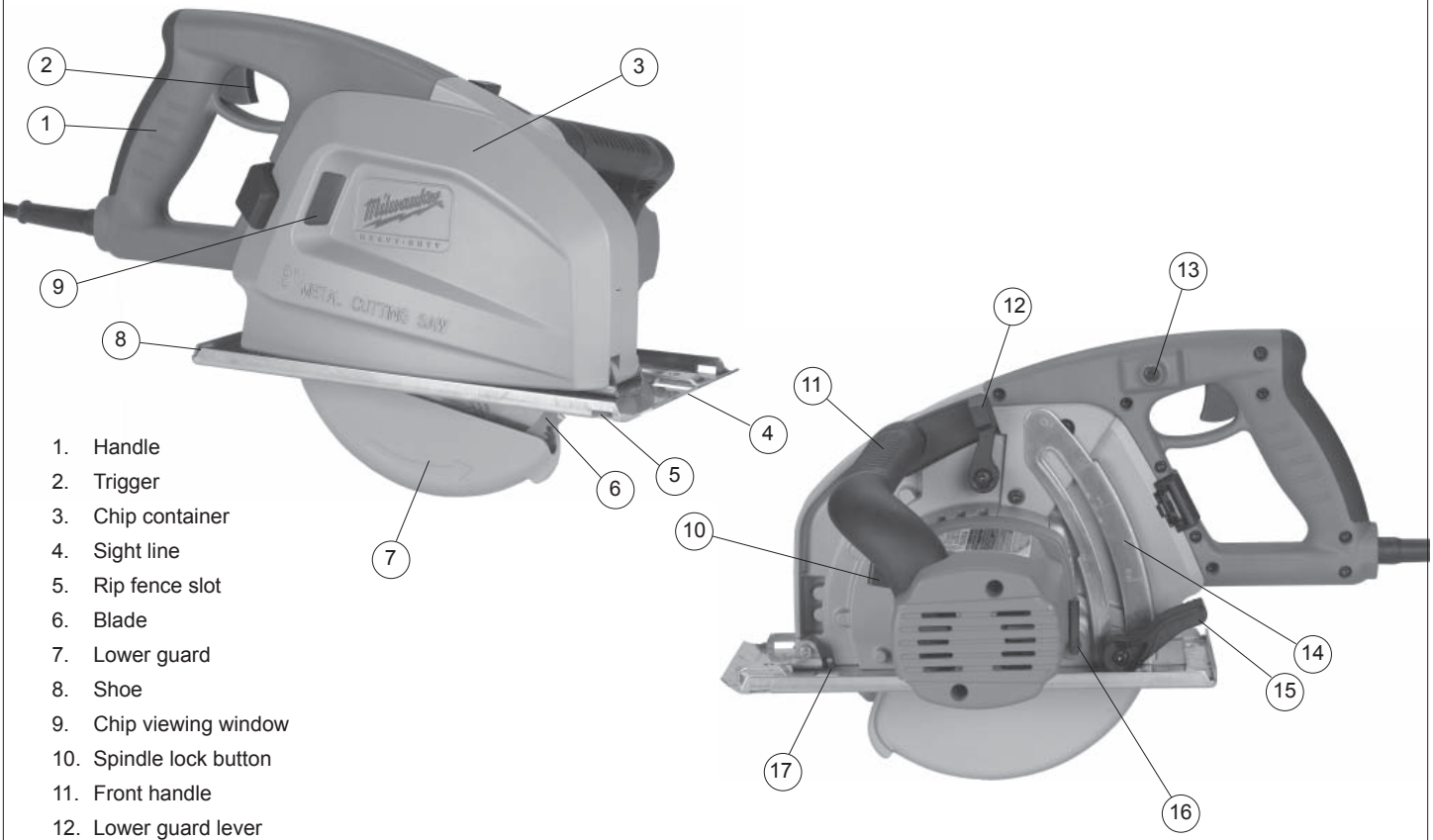
| Cat. No. | Volts AC Only | Amps | No Load RPM | Blade Size | Round Arbor | Depth of Cut |
|---|---|---|---|---|---|---|
| **6370-20** | 120 | 13 | 3700 | 8" | 5/8" | 0 to 2-9/16" |
| **6370-21** | 120 | 13 | 3700 | 8" | 5/8" | 0 to 2-9/16" |

## Capacities

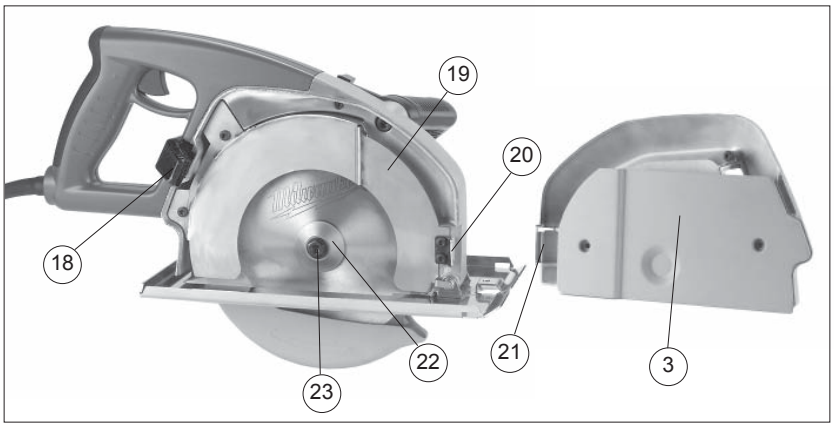
| Materials * | 6370-20 and 6370-21 |
|---|---|
| Steel Studs, Steel Decking, Roofing Panels | 10 gauge, up to 2-9/16" thick |
| Steel Plate | 1/4" thick |
| Angle Iron | 2-1/2" x 2-1/2" x 1/4" |

* See "Applications" for requirements when cutting thicker materials.

## FUNCTIONAL DESCRIPTION




1. Handle
2. Trigger
3. Chip container
4. Sight line
5. Rip fence slot
6. Blade
7. Lower guard
8. Shoe
9. Chip viewing window
10. Spindle lock button
11. Front handle
12. Lower guard lever
13. Overload protector
14. Depth setting gauge
15. Depth adjusting lever
16. Hex wrench
17. Contact window
18. Latch
19. Upper guard
20. Tab
21. Tab pin
22. Outer blade flange
23. Blade bolt



## GROUNDING

**WARNING**

**Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the cord or plug is damaged. If damaged, have it repaired by a *MILWAUKEE* service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.**

**Grounded Tools:**
**Tools with Three Prong Plugs**

Tools marked "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet (See Figure A). If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock.

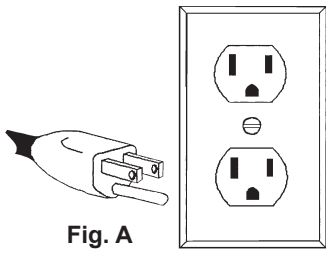


**Fig. A**

The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal.

Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in Figure A.

**Double Insulated Tools:**
**Tools with Two Prong Plugs**

Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association and the National Electrical Code. Double Insulated tools may be used in either of the 120 volt outlets shown in Figures B and C.

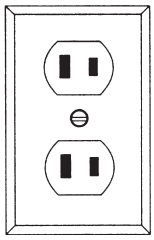


**Fig. B**

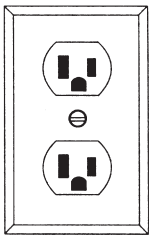


**Fig. C**

## EXTENSION CORDS

Grounded tools require a three wire extension cord. Double insulated tools can use either a two or three wire extension cord. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. Refer to the table shown to determine the required minimum wire size.

The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. When using more than one extension cord to make up the total length, be sure each cord contains at least the minimum wire size required. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum wire size.

**Guidelines for Using Extension Cords**

- If you are using an extension cord outdoors, be sure it is marked with the suffix "W-A" ("W" in Canada) to indicate that it is acceptable for outdoor use.
- Be sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.
- Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

**Recommended Minimum Wire Gauge for Extension Cords***

| Nameplate Amperes | Extension Cord Length | | | | | |
|---|---|---|---|---|---|---|
| | 25' | 50' | 75' | 100' | 150' | 200' |
| 0 - 5 | 16 | 16 | 16 | 14 | 12 | 12 |
| 5.1 - 8 | 16 | 16 | 14 | 12 | 10 | -- |
| 8.1 - 12 | 14 | 14 | 12 | 10 | -- | -- |
| 12.1 - 15 | 12 | 12 | 10 | 10 | -- | -- |
| 15.1 - 20 | 10 | 10 | 10 | -- | -- | -- |

* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

**READ AND SAVE ALL INSTRUCTIONS FOR FUTURE USE.**

## TOOL ASSEMBLY

**WARNING**

**To reduce the risk of injury, always unplug tool before attaching or removing accessories or making adjustments. Use only specifically recommended accessories. Others may be hazardous.**

### Selecting Blade

Select a blade appropriate for your application. Refer to the “Accessories” section for a list of blades for this tool.

Always use sharp blades. Dull blades tend to overload the tool and increase the chance of KICKBACK. Only use blades with a maximum safe operating speed greater than the no load RPM marked on the tool's nameplate. Read the blade manufacturer's instructions before use. Do not use any type of abrasive cut-off wheel or dry diamond cutting blades. Use the correct blade type for your application. Using the wrong blade may result in reduced performance or damage to the blade. Do not use blades that are cracked or have broken teeth.

### Checking the Operation of the Lower Guard

Check the operation and condition of the lower guard lever. If the guard and the lever are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a buildup of debris.

1. Unplug tool before checking the lower guard.
2. Place the tool on its side (Fig. 1).

   **NOTE:** This procedure will not show proper lower guard operation if the tool is not on its side.
3. Grasp the lower guard by the sides and push it all the way back into the blade housing.
4. Release the lower guard.
   - If the guard immediately springs back into place, it is working correctly and you may continue with use.
   - If the guard does not immediate spring back into place, clean the upper and lower guards to remove all chips and debris. Then, check the operation again by starting with step 1.
   - If the guard still does not immediately spring back into place, contact a *MILWAUKEE* service facility for repairs.

### Removing and Installing Chip Container

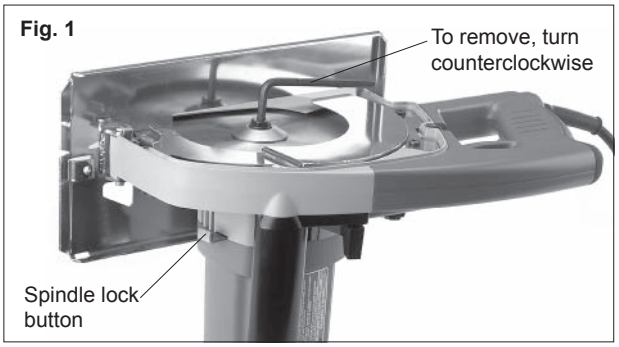
**WARNING**

- **NEVER operate tool when guards and chip container are not installed. Serious injury may occur.**
- **To reduce the risk of injury, wear safety goggles or glasses with side shields when removing the chip container. Chips and debris may fly up into the face.**

1. Unplug tool before removing or installing chip container.
2. To **remove** the chip container, open the latch and pull the chip container off of the tab.
3. To **install** the chip container, fit the tab pin onto the tab, position the chip container, and secure the latch.

### Installing and Removing Blades (Figs. 1 & 2)

**Fig. 1**




1. Unplug tool before installing or removing blades.
2. Remove the chip container (see "Removing and Installing Chip Container").
3. Place the saw on a flat surface with the blade facing up (Fig. 1). To remove the blade bolt from the spindle, push in the spindle lock button and hold. Using the wrench provided with the tool, turn the blade bolt counterclockwise. Remove the blade bolt and outer blade flange. Do not remove the inner blade flange.
4. Remove the blade from the spindle. Always clean the spindle, upper guard, lower guard, and blade flanges to remove any chips and debris.
5. To install a blade, place the blade on the spindle with the teeth pointing in the same direction as the arrow on the lower guard (Fig. 2).

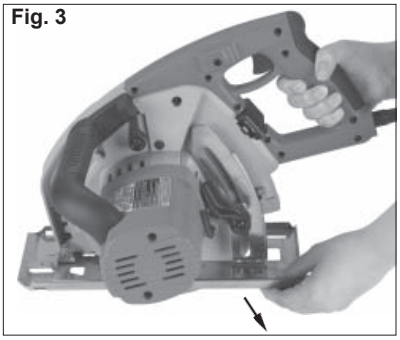
**Fig. 2**

6. Place the blade flange on the spindle and hand tighten the blade bolt.
7. While holding in the spindle lock button, use the wrench to turn the blade bolt clockwise and tighten securely.
8. Replace the chip container (see "Removing and Installing Chip Con-

**Adjusting Depth (Figs. 3 & 4)**

1. Unplug tool before adjusting blade depth.
2. To adjust the depth of the cut, hold the saw by the handle and loosen the depth adjusting lever by pulling it up, away from the shoe (Fig. 3).

Fig. 3



3. Raise or lower the shoe to the desired position. For the proper depth setting, the blade should extend no more than 1/4" below the material being cut (Fig. 4).
4. Push the depth adjusting lever down to secure the shoe position.

Fig. 4

**Emptying the Chip Container**

Chips and other debris from the workpiece are collected inside the chip container, which needs to be emptied to ensure proper functioning of the tool.

1. Unplug tool.
2. Remove the chip container (see "Removing and Installing Chip Container") and empty. Use a brush to ensure all chips and debris have been removed.
3. Remove all chips and debris from upper guard, blade, and housing.
4. Replace the chip container (see "Removing and Installing Chip Container").

## *OPERATION*

**Causes and Operator Prevention of KICKBACK:**

KICKBACK is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.

When the blade is pinched or bound tightly by the kerf, or cutting slot, closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.

If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward operator.

*KICKBACK is the result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:*

1. **Maintain a firm grip with both hands on the saw and position your body and arm to allow you to resist KICKBACK forces.** KICKBACK forces can be controlled by the operator, if proper precautions are taken.
2. **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or KICKBACK may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.
3. **When restarting a saw in the workpiece, center the saw blade in the kerf, or cut, and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.
4. **Support large panels to minimize the risk of blade pinching and KICKBACK.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
5. **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and KICKBACK.
6. **Depth adjusting lever must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and KICKBACK.
7. **Use extra caution when making a "Pocket Cut" into existing walls or other blind areas.** The protruding blade may cut objects that can cause KICKBACK.
8. **Set the depth of cut for no more than 1/4" greater than the thickness of the stock.** The less blade exposed, the less chance of binding and KICKBACK. Before cutting, be sure depth and bevel adjustments are tight.
9. **Stay alert.** Any distraction can cause twisting or binding. Repetitive cuts may lull the user into careless movements.

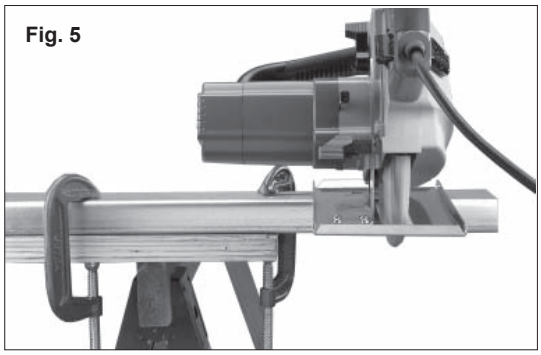
**WARNING**

**To reduce the risk of injury, everyone in the work area should wear safety goggles or glasses with side shields. Unplug the tool before changing accessories or making adjustments.**

**General Operation (Figs. 5 & 6)**

Always clamp the workpiece securely on a saw horse or bench (Fig. 5). See “Applications” for the correct way to support your work in different situations.

**Fig. 5**



1. Draw a cutting line. Place the front of the shoe on the edge of the workpiece without making blade contact. Hold the trigger handle with one hand and the front handle with the other (Fig. 6).

**Fig. 6**

2. Line up the sight line with your cutting line. Position your arms and body to resist KICKBACK.
3. Pull the trigger and allow the motor to reach full speed before beginning cut.
4. While cutting, keep the shoe flat against the workpiece and maintain a firm grip. Do not force the saw through the workpiece. Forcing a saw can cause KICKBACK. Use a light, continuous pressure to make the cut while following the cut line through the sight line.
5. If making a partial cut, restarting in mid-cut or correcting direction, allow the blade to come to a complete stop. To resume cutting, center the blade in the kerf, back the saw away from cutting edge a few inches, pull the trigger and re-enter the cut slowly.
6. If the saw binds and stalls, maintain a firm grip and release the trigger immediately. Hold the saw motionless in the workpiece until the blade comes to a complete stop.
7. After finishing a cut, be sure the lower guard closes and the blade comes to a complete stop before setting the saw down.

**Overload Protector**

The overload protector automatically turns off the tool when the motor is overloaded. The tool can become overloaded when using a dull blade, cutting material that is too thick, cutting materials too quickly, or cutting hard metals such as stainless steel. To prevent the overload protector from activating, always use a sharp blade and follow the cutting instructions under the "Applications" section. Do not attempt to defeat or override the overload protector.

If the tool turns off automatically:

1. Release the trigger and unplug the tool.
2. Remove the blade from the workpiece.
3. Allow the tool to rest for a miniumum of two minutes.
4. Reset the overload protector by pushing in the button.
5. Allow the tool to run under no load to ensure the tool has properly cooled.
6. Resume the cut. When restarting a saw in the workpiece, center the saw blade in the kerf, or cut, and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.

## APPLICATIONS

This tool is intended for cutting unhardened ferrous metal and non-ferrous metal. Refer to the “Accessories” section for a list of blades to be used for the proper applications of this tool. The following precautions must be followed to reduce the risk of injury:

- Do not cut stacked materials. Cut one piece at a time.
- Do not cut hardened steel.
- Cut materials with the wider edge of the shoe over the clamped side of the material.
- Do not touch the blade, workpiece, chips, or chip container with bare hands immediately after cutting; they may be hot and could burn skin.

**Cutting Materials Thicker than 1/4" (3/4" Maximum Thickness)**

***CAUTION!***

**To reduce the risk of damage to the tool or blade, do not exceed the Feed Rate and Maximum Cut Time for materials thicker than 1/4", as charted below.**

**Between Maximum Cut Times, allow the tool to cool down for 6 minutes of running with no load or 60 minutes switched off.**

**Cutting too fast or too long in heavy material will damage the tool if the tool is not allowed to cool.**

**Cutting too slow will cause excessive wear on the blade.**

When cutting materials over 1/4", certain guidelines must be followed to avoid serious damage to the tool and/or blade. The correct combination of the following factors will allow for a sucessful cut through thicker materials:

1. **Material Thickness** (do not cut materials thicker than 3/4")

   **NOTE:** If the material thickness is not shown in the chart below, round up to the nearest thickness listed in the chart and follow those guidelines.
2. **Maximum Length of Cut** (the length of material in inches through which the saw moves between cool down periods)
3. **Feed Rate** (the speed at which the saw moves through the material in seconds per inch)
4. **Maximum Cutting Time** (the total amount of time that the saw can be under load between cool down periods.
5. **Cool Down Period** (6 minutes running with no load or 60 min. switched off.)

| Material Thickness | Maximum Cutting Time (seconds) | Max Length of Cut | Feed Rate (sec./inch) | Cool Down Period |
|---|---|---|---|---|
| **3/8"** | 30 - 45 | 15" | 2 - 3 | 6 min. of running with no load or 60 min. switched off |
| **1/2"** | 18 - 36 | 9" | 2 - 4 | |
| **5/8"** | 18 - 30 | 6" | 3 - 5 | |
| **3/4"** | 20 - 25 | 5" | 4 - 5 | |

**Cutting Thin or Corrugated Materials**

Cut thin and corrugated materials at least 1" from the edge of the workpiece to avoid injury or damage to the tool caused by thin strips of metal being pulled into the upper guard.

**Cutting Large Sheets**

Large sheets sag or bend if they are not correctly supported. If you attempt to cut without leveling and properly supporting the workpiece, the blade will tend to bind, causing KICKBACK.

Support large sheets. Be sure to set the depth of the cut so that you only cut through the workpiece, not through the supports.

When cutting widths greater than 4", clamp 1" lumber to workpiece and use the inside edge of the shoe as a guide.

**Pocket Cutting (Fig. 7)**

***WARNING!***

**To reduce the risk of electric shock, check work area for hidden pipes and wires before making pocket cuts.**

Pocket cuts are made in the middle of the workpiece when it can not be cut from an edge. We recommend using a Sawzall® reciprocating saw or jig saw for this type of cut. However, if you must use a circular saw to make a pocket cut, USE EXTREME CAUTION. To maintain control of the saw during pocket cutting, keep both hands on the saw (Fig. 7).

Fig. 7

1. Beginning at a corner, line up the sight line with your cutting line. Tilt the saw forward, firmly fixing the front of the shoe on the workpiece. The blade should be just above cutting line, but not touching it. Raise the lower guard using the lower guard lever.
2. Pull the trigger and allow the motor to reach full speed before beginning cut. Using the front of the shoe as a hinge point, gradually lower the back end of the saw into the workpiece. Release the lower guard lever.
3. When the shoe rests flat against workpiece, advance the saw to the far corner. Release the trigger and allow the blade to come to a complete stop before removing it from workpiece. Repeat the above steps for each side of the opening. Use a Sawzall® reciprocating saw, jig saw or small hand saw to finish the corners if they are not completely cut through.

**Troubleshooting**

If the blade does not follow a straight line:

- Teeth are dull. This is caused by hitting a hard object, dulling teeth on one side. The blade tends to cut to the side with the sharpest teeth.
- Shoe is out of line or bent
- Blade is bent

If the blade binds, smokes or turns blue from friction:

- Blade is dull
- Blade is on backwards
- Blade is bent
- Blade is dirty
- Workpiece is not properly supported
- Incorrect blade is being used

## MAINTENANCE

**WARNING**

**To reduce the risk of injury, always unplug your tool before performing any maintenance. Never disassemble the tool or try to do any rewiring on the tool's electrical system. Contact a *MILWAUKEE* service facility for ALL repairs.**

**Maintaining Tools**

Keep your tool in good repair by adopting a regular maintenance program. Before use, examine the general condition of your tool. Inspect guards, switches, tool cord set and extension cord for damage. Check for loose screws, misalignment, binding of moving parts, improper mounting, broken parts and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, turn the tool off immediately and have the problem corrected before further use. Do not use a damaged tool. Tag damaged tools “DO NOT USE” until repaired (see “Repairs”).

Under normal conditions, relubrication is not necessary until the motor brushes need to be replaced. After six months to one year, depending on use, return your tool to the nearest *MILWAUKEE* service facility for the following:

- Lubrication
- Brush inspection and replacement
- Mechanical inspection and cleaning (gears, spindles, bearings, housing, etc.)
- Electrical inspection (switch, cord, armature, etc.)
- Testing to assure proper mechanical and electrical operation

**WARNING**

**To reduce the risk of injury, electric shock and damage to the tool, never immerse your tool in liquid or allow a liquid to flow inside the tool.**

**Cleaning**

Clean dust and debris from vents. Keep the tool handles clean, dry and free of oil or grease. Use only mild soap and a damp cloth to clean your tool since certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include: gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around tools.

**Repairs**

If your tool is damaged, return the entire tool to the nearest service center.

## ACCESSORIES

**WARNING**

**To reduce the risk of injury, always unplug the tool before attaching or removing accessories. Use only specifically recommended accessories. Others may be hazardous.**

For a complete listing of accessories refer to your *MILWAUKEE* Electric Tool catalog or go on-line to www.milwaukeetool.com. To obtain a catalog, contact your local distributor or a service center.

**8" Metal Cutting Blades**

**42 Tooth Blade**
**For cutting metal workpieces greater than 3/32" thick.**
Cat. No. 48-40-4515

**50 Tooth Blade**
**For cutting metal workpieces less than 3/32" thick.**
Cat. No. 48-40-4520

**Blade Wrench (Allen)**
Cat. No. 49-96-0345

**Rip Fence**
Cat. No. 49-22-4146

## FIVE YEAR TOOL LIMITED WARRANTY

Every MILWAUKEE tool is tested before leaving the factory and is warranted to be free from defects in material and workmanship. MILWAUKEE will repair or replace (at MILWAUKEE’s discretion), without charge, any tool (including battery chargers) which examination proves to be defective in material or workmanship from five (5) years after the date of purchase. Return the tool and a copy of the purchase receipt or other proof of purchase to a MILWAUKEE Factory Service/Sales Support Branch location or MILWAUKEE Authorized Service Station, freight prepaid and insured. This warranty does not cover damage from repairs made or attempted by other than MILWAUKEE authorized personnel, abuse, normal wear and tear, lack of maintenance, or accidents.

The warranty period for V28 Battery Packs is two (2) years from the date of purchase. The warranty period for Ni-Cd battery Packs, Flashlights, Radios are warranted for one (1) year from the date of purchase.

THE REPAIR AND REPLACEMENT REMEDIES DESCRIBED HEREIN ARE EXCLUSIVE. IN NO EVENT SHALL MILWAUKEE BE LIABLE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOSS OF PROFITS.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, OR CONDITIONS, WRITTEN OR ORAL, EXPRESSED OR IMPLIED FOR MERCHANTABLILITY OR FITNESS FOR PARTICULAR USE OR PURPOSE.

This warranty gives you specific legal rights. You may also have other rights that vary from state to state and province to province. In those states that do not allow the exclusion of implied warranties or limitation of incidental or consequential damages, the above limitations or exclusions may not apply to you. This warranty applies to the United States, Canada, and Mexico only.